Application No.:

10/712,087

Amendment Dated:

April 23, 2007

Reply to Office Action of: January 22, 2007

SNK-3750US3 (Formerly YAO-3750US3)

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-77. (Cancelled).

78. (Currently Amended) A laser light source, comprising:

a distributed feedback type semiconductor laser for emitting laser light;

a semiconductor laser amplifier for amplifying the laser light; and

an optical wavelength conversion element for receiving the amplified laser light so as to generate a harmonic wave, the optical wavelength conversion element having periodic domain inverted structures,

wherein the optical wavelength conversion element is formed of a stable proton exchange layer whose refractive index does not vary with time during operation, the stable proton exchange layer is configured to prevent a temporal variation in the refractive index when a pseudo-phase matching condition of the stable proton exchange layer is satisfied.

- 79. (Previously Presented) A laser light source according to claim 78, wherein the optical wavelength conversion element has a modulation function.
- (Previously Presented) A laser light source according to claim 78, 80. wherein the optical wavelength conversion element is formed in an LiNb_xTa_{1-x}O₃ ($0 \le X$ \leq 1) substrate.
 - 81. (Cancelled).
 - 82. (Previously Presented) A laser light source according to claim 78,

wherein an optical waveguide is formed on the optical wavelength conversion element, and

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wherein a width and a thickness of the optical waveguide are each 40 µm or greater.

- (Previously Presented) A laser light source according to claim 82, 83. wherein the optical wavelength conversion element has a modulation function.
- (Previously Presented) A laser light source according to claim 82, wherein the optical wavelength conversion element is formed in an LiNb_xTa_{1-x}O₃ (0 \leq X \leq 1) substrate.
- (Previously Presented) A laser light source according to claim 82, 85. wherein the optical waveguide is of a graded type.
 - 86-87. (Cancelled).